1 2

3

4 5

6

7 8

9

10 11

12 13 14

15

2**4** 

25

26

27

28

29

30

31

**PATENT** 

### SHOE SOLE WITH SIZING INDICATORS

# CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to applicant's co-pending Provisional Application Serial No. 60/223,919, filed August 9, 2000, which is hereby incorporated herein in full by reference.

# FIELD OF THE INVENTION

The present invention relates to a shoe with sizing indicators, a shoe size indication system, and methods useful for determining a proper shoe size for a person's foot. Embodiments of the present invention provide a shoe outsole having sizing indicators advantageous for use in quick determination of a proper shoe size for a person's foot.

#### **BACKGROUND OF THE INVENTION**

Historically, a number of approaches have been used to assist customers in determining the proper shoe size when purchasing shoes. Shoe size indicator systems have involved devices other than actual shoes to determine a proper size shoe for a foot. One approach, for example, includes a device combining separate toe and heel sections that can be placed onto a person's toes and heel respectively. Scaled bottom portions of each of the toe and heel sections extend toward and overlap the other section, the point on the scale at which the extensions overlap indicating shoe size. U.S. Patent No. 1,821,051 to Brown describes such a device.

Another traditional device for determining proper shoe size comprises a rigid plate of material, such as metal or wood, having a lengthwise recess and scaled markings on its upper surface, a semicircular heel positioning member, and an arcuate toe positioning member, an

extension of which is movable within the recess. When a person stands with heel against the heel positioning member, the toe positioning member is moved against the end of the person's toes, the recessed extension thereby moving along the scaled markings to indicate shoe size. A disadvantage of such shoe size indicator systems is the need for maintaining a supply of separate, specially-made sizing devices in a retail store. Other disadvantages include the need for a customer to locate a separate shoe sizing device, or to find a salesperson to locate a sizing device, and possibly enlisting the assistance of a salesperson in use of the device. Yet another disadvantage of shoe size indicator devices used independently from shoes is that such devices do not provide any information regarding a particular shoe, such as the fit of a particular shoe, to be purchased.

i 1∰;

15)

16<sup>1</sup>

Systems designed to indicate the fit of a particular shoe have been incorporated into shoes. Integrated shoe fit indication systems have often relied on location of a wearer's foot in relation to an insole. One example of such an approach is U.S. Patent No. 2,654,965 to Sloan et al., which includes a shoe having an upper with sides, tongue, and toe-end portion all movable so as to permit viewing of the position of a wearer's foot with respect to the entire insole with the foot in place in the shoe. In the Sloan et al. patent, the upper face of the insole at the toe portion is provided with a visible gauge marking to indicate a point beyond which the toes of a foot should not be placed with respect to the insole.

Other shoe fit indicator systems involving insoles utilize a transferable marking means. For example, U.S. Patent No. 2,464,571 to Gardner discloses a shoe fit indicator in which the interior of the forward or toe part of a shoe is provided with marking means either on the inward surface of the sole or on the inward surface of the upper or on both. Such marking means is arranged so as to apply to the toes of a foot a visible mark indicating the relation of the wearer's

toes to a zone of improper fit at the end of the shoe. Another example of a shoe fitting aid

wherein an insole is marked is U.S. Patent No. 2,860,416 to Pfund. Pfund discloses a thin,

3 removable, and imprintable composite insole and a thin sheet having a coating of pressure-

4 transferable marking compound or similar material which can leave an impression on an insole.

When a foot is pressed against the sheet, marking compound is transferred to the insole so as to

display the position of the foot relative to the insole.

5

6

7

8

9

The state of the s

17

18

19

20

21

22

Shoe fitting approaches using insoles are disadvantageous because of the inconvenience of requiring that a person's foot be placed inside the particular shoe under consideration. Shoe fitting techniques involving a marking means in conjunction with an insole have further disadvantages. Such disadvantages include the need to maintain in a retail store an inventory of the appropriate materials, such as imprintable composite insoles and sheets of pressure-transferable marking compound, the need to have store personnel trained in use of such materials and methods, and the need for such personnel to assist customers in the use of these materials and methods.

A system for determining a proper shoe size placed on the outsole of a shoe would overcome many of the disadvantages of traditional approaches. Having a shoe size measurement system on the actual shoes to be sold would virtually eliminate the need for maintaining a supply of separate, specially-made sizing devices in a retail store. Use of a shoe size indicator on the actual shoes for purchase by a customer would decrease, or eliminate, the need for assistance by store personnel to locate a separate measuring device and instruct, and/or assist, the customer in its use. A system for determining a proper shoe size on the outsole of a shoe would also eliminate the inconveniences, extra materials, and customer and store personnel time required to

determine the location of a wearer's foot in relation to an insole, either by visual inspection or by use of a marking means.

One approach to a system for measuring the fit of a person's foot on the outsole of a shoe is advertised by Sole Concepts (American Shoemaking, May 2000, pages 13-14). Sole Concepts discloses a "Toe Zone Scale" on the outsole of a shoe comprising a heel locator and a bar showing the position of the toes in relation to the internal end of the shoe to indicate proper fit. With the heel properly aligned, if the toes fall short of the fit bar, a smaller size is indicated; if the toes fall past the bar, a larger size is recommended; and if the toes fall within the bar area, a proper fitting length is indicated. However, such a qualitative approach to shoe fitting does not provide indication of the specific shoe size of a foot being measured. Thus, a shoe fit measuring system such as the "Toe Zone Scale" disclosed by Sole Concepts is limited to providing an indication of whether the one particular shoe against which a foot is being measured would fit, rather than a measurement of the actual shoe size for a person's foot.

Prior approaches to determining a proper shoe size have not provided for placement and use of shoe size indicators scaled according to specific standard shoe sizes on the outsole of a shoe to be worn.

Accordingly, there remains a need for a shoe size indication system for determining a proper shoe size for a person's foot that does not require additional shoe fitting devices, complicated materials and instructions, and/or assistance by store personnel. There is also a need for a shoe size indication system for determining a proper size shoe for a person's foot that is placed on the outsole of a shoe, that can be easily and economically made, and that can be used by customers conveniently, quickly, and accurately. It is to these perceived needs that the present invention is directed.

## SUMMARY OF THE INVENTION

The present invention provides a shoe with sizing indicators, a shoe size indication system, and methods for determining a shoe size. A shoe outsole having sizing indicators thereon, as in the present invention, comprises a system for quickly and accurately measuring a person's foot to determine a proper shoe size.

In the present invention, a shoe and a shoe size indication system for determining a proper shoe size for a person's foot includes an outsole having a heel portion, a forward portion, a length, and a width, a heel placement indicator positioned on the heel portion, and a plurality of shoe size indicators located on the forward portion. Each of the shoe size indicators is located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and further comprises a label with the corresponding shoe size. In use, a method of the present invention for determining a proper shoe size for a person's foot comprises aligning the rear margin of a person's heel with a heel placement indicator, positioning the person's toes to overlap the shoe size indicators, and observing the location of the forward margin of the person's toes on the shoe size indicators. The shoe size indicator immediately beyond the end of the forward margin of the person's toes indicates the proper shoe size for the person's foot.

In embodiments of the present invention, a heel placement indicator is positioned on the outsole heel portion in alignment with proper placement of a heel inside the shoe. A shoe size indication system as in the present invention may be temporarily printed onto an outsole or permanently integrated into an outsole, such as in a molded construction. In other embodiments, a shoe of the present invention further comprises a transparent material overlaying the outsole such that the heel placement indicator and shoe size indicators can be seen through the material.

In embodiments, shoe size indicators comprise standard shoe sizes for a particular age group and/or gender-specific shoe sizes. Embodiments of a shoe of the present invention further comprise patterns having appeal to the age group and gender that would typically wear the shoe sizes thereon.

12 13

Features of a shoe with sizing indicators, a shoe size indication system, and methods for determining a proper shoe size for a person's foot of the present invention may be accomplished singularly, or in combination, in one or more of the embodiments of the present invention. As will be appreciated by those of ordinary skill in the art, the present invention has wide utility in a number of applications as illustrated by the variety of features and advantages discussed below.

A shoe with sizing indicators, a shoe size indication system, and methods for determining a shoe size as in the present invention provide benefits and advantages over previous approaches to determining the proper fit or size of a shoe. The present invention provides the advantages of being quick and simple to use, allowing accurate shoe size determinations without additional materials or assistance, and is economical to manufacture.

For example, a shoe size indication system on the outsole of a shoe finds practical use in retail stores where other traditional shoe sizing devices are not available, or not readily available, and where store personnel may not be present for assisting a customer. Also, in the present invention, a customer is not required to adjust any movable components in order to determine shoe size, as in traditional sliding shoe size measurement devices. Thus, a shoe size indication system on the outsole of a shoe is convenient to locate and easy to use without any need for assistance by store personnel.

Such a quick shoe size indication system as in the present invention is particularly beneficial for use with children. It is often difficult to accurately determine shoe size for

children, as they typically are restless and have short attention spans and little patience for a more involved shoe size determination process, as with use of a separate measuring device or by trying on shoes. As such, a shoe size indication system on the outsole of a shoe provides the advantage of quick and accurate determination of a child's shoe size by an adult without the need for a separate measuring device and before the child tries on any shoes.

the second state of the second second

In addition to initially providing for a quick and accurate reading of a person's shoe size at the time of purchase, the present invention is useful in determining when a child, for example, has outgrown a shoe. Monitoring growth of feet is especially important for children because their feet are still developing. Therefore, it is advantageous to be able to readily and accurately assess a child's foot in relation to a shoe to determine when the shoe should be replaced to provide a proper fitting shoe. A shoe size indication system on the outsole of a shoe as in the present invention allows continual monitoring of the growth of a child's foot and possible identification of the shoe size to be next purchased.

Another advantage of the present invention is that embodiments may include designs having appeal for the age and gender of the wearer for which the shoe is intended. For example, a shoe sole with sizing indicators as in the present invention on a toddler's shoe may further comprise designs of stuffed animals and toys integrated into the shoe sole. Such designs would provide objects of curiosity for a toddler. A shoe sole with sizing indicators on a pre-schooler's shoe may include letters of the alphabet, numbers, and geometric figures. Such age-specific designs can foster a pre-schooler's interest in participating with parents in purchasing shoes and provide educational interest in the objects contained in a design. Additionally, designs such as floral and geometric patterns and sports figures, integrated into a shoe sole with sizing indicators, may provide a source of pride by the wearer in the shoes being worn.

Placing the size of the particular shoe on the outsole allows a customer to quickly compare the actual size of the shoe with the shoe size indicated for a customer whose shoe size is being measured. As such, the present invention provides for determining the proper shoe size for the person's foot being measured, as well as whether the particular shoe on which a shoe size indication system is being used is a proper size shoe for that person.

**4** 

Another advantage is that a shoe size indication system according to the present invention provides for shoe size determinations that are convenient, quick, accurate, and can be obtained at any time prior to or after purchase of a shoe embodying the present invention.

As will be realized by those of skill in the art, many different embodiments of a shoe with sizing indicators, a shoe size indication system, and methods for determining shoe size according to the present invention are possible. Additional uses, objects, advantages, and novel features of the invention are set forth in the detailed description that follows and will become more apparent to those skilled in the art upon examination of the following or by practice of the invention.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a diagrammatic view of the outsole of a left shoe illustrating a shoe size indication system, the right shoe of a pair being a mirror image of the shoe in Figure 1, in an embodiment of the present invention.

FIGURE 2 is a diagrammatic view of a shoe size indication system on the outsole of an infant's shoe, depicting shoe sizes for an infant and age-specific designs of interest in an embodiment of the present invention.

FIGURE 3 is a diagrammatic view of a shoe size indication system on the outsole of a toddler's shoe, depicting shoe sizes for a toddler and age-specific designs of interest in an embodiment of the present invention.

FIGURE 4 is a diagrammatic view of a shoe size indication system on the outsole of a girl's shoe, depicting shoe sizes for a girl and age and gender-related designs of interest in an embodiment of the present invention.

FIGURE 5 is a diagrammatic view of a shoe size indication system on the outsole of a boy's shoe, depicting shoe sizes for a boy and age and gender-related designs of interest in an embodiment of the present invention.

FIGURE 6 is a diagrammatic view of a shoe size indication system on the outsole of a woman's shoe, depicting shoe sizes for an adult size woman and age and gender-related designs of interest in an embodiment of the present invention.

FIGURE 7 is a diagrammatic view of a shoe size indication system on the outsole of a man's shoe, depicting shoe sizes for an adult size man and age and gender-related designs of interest in an embodiment of the present invention.

FIGURE 8 is diagrammatic view of the shoe size indication system of Fig. 1 on the outsole of a shoe, illustrating an overlay of transparent material over the a shoe size indication system in an embodiment of the present invention.

FIGURE 9 is side elevation view of a shoe having an overlay of transparent material over a shoe size indication system in an embodiment of the present invention.

## **DETAILED DESCRIPTION**

1	
2	
3	

15 m 16 m 17 m 17 m

The present invention provides a shoe with sizing indicators, a shoe size indication system, and methods for determining a proper shoe size in a quick, convenient, and accurate manner.

Referring to Figure 1, in embodiments of the present invention, a shoe 10 for determining a proper shoe size comprises an outsole 20, and a heel placement indicator 30 and a plurality of shoe size indicators 40 on outsole 20. Outsole 20 includes a heel portion 21, a forward portion 22, a length 23, and a width 24. Heel placement indicator 30 is positioned on heel portion 21. Shoe size indicators 40 are located on at least a portion of forward portion 22. Each of the plurality of shoe size indicators 40 is located a distance from heel placement indicator 30 along length 23 of outsole 20 corresponding to a different shoe size and is labeled with the corresponding shoe size. For example, in Figure 1, the shoe size indicator 40 for a size 4 shoe (43) is located distance 41 from heel placement indicator 30. And the shoe size indicator 40 for a size 6 shoe (44) is located a different distance 42 corresponding to the length for a size 6 shoe from heel placement indicator 30.

In preferred embodiments, heel placement indicator 30 is positioned on the outsole heel portion 21 in alignment with proper placement of a wearer's heel inside shoe 10. Accordingly, a last bottom used to form shoe 10 can be utilized to locate the proper position of heel placement indicator 30 on the shoe outsole 20.

In embodiments, each of the plurality of shoe size indicators 40 further comprises a line 45 located across at least a portion of width 24 of outsole forward portion 22. Indicator lines 45 can be located across a portion or all of the width 24 of outsole 20 in the instep, ball, and toe areas. Indicator lines 45 are labeled with the incremental shoe size, 43, 44, for example,

1 corresponding to the distance, 41, 42, for example, of a particular indicator line 45 from heel

2 placement indicator 30. Shoe size indicator lines 45 can be placed at the proper distances from

3 heel placement indicator 30 for a range of shoe sizes, including half sizes. Preferably, shoe sizes

represented by shoe size indicators 40 on an outsole 20 approximate the actual size of the

particular shoe 10 on which shoe size indicators are placed.

4

5

6

7

8

9

15 16 Shoe size indicators 40 of the present invention comprise sizes corresponding to standard overall sizing dimensions, including length and width, proportioned for the type of foot, such as for a particular age and gender, for which the shoe is made. In addition to shoe size indicators 40 that refer to shoe length, and thus overall proportionality, embodiments of the present invention further include shoe size indicators specific to shoe width (not shown) on the outsole of a shoe. Embodiments of shoe size indicators 40 of the present invention correspond to and represent standard shoe sizes, 43, 44, for example, standard shoe sizes used in a particular country, such as the United States, the United Kingdom, Europe, Mexico, Japan, and other countries. Examples of conversions for standard shoe sizes between various countries are listed below:

<b>Toddler Shoe Size Conversion Table</b>				
USA	UK	EUR	Mexico	Japan
0	0	15	7	-
1	.5	16	8	8.5
2	1.5	17.5	9	9.5
3	2.5	19	10	10.5
4	3.5	20	11	11.5

<b>Children's Shoe Size Conversion Table</b>				
USA	UK	EUR	Mexico	Japan
5	4.5	21	12	12.5
5.5	5	22	12.5	13
6	5.5	22.5	13	13
6.5	6	23	13.5	13.5
7	6.5	23.5	14	14
7.5	7	24	14.5	14.5
8	7.5	25	15	15

5
6
7

8.5	8	25.5	15.5	15.5
9	8.5	26	16	16
9.5	9	27	16.5	16.5
10	9.5	27.5	17	16.5
10.5	10	28	17.5	17

Girls and Boys (Youth) Shoe Size Conversion Table				
USA	UK	EUR	Mexico	Japan
11	10.5	29	18	17.5
11.5	11	29.5	18.5	18
12	11.5	30	19	18.5
12.5	12	30.5	19.5	18.5
13	12.5	31	20	19
13.5	13	32	20.5	19.5
1	13.5	32.5	21	20
1.5	1	33	21.5	20.5
2	1.5	34	22	21
2.5	2	34.5	22.5	21.5
3	2.5	35	23	22
3.5	3	35.5	23.5	-
4	3.5	36	24	_

<b>Women's Shoe Size Conversion Table</b>				
USA	UK	EUR	Mexico	Japan
5	3.5	36	22	22
5.5	4	37	22.5	22.5
6	4.5	37.5	23	23
6.5	5	38	23.5	23.5
7	5.5	39	24	24
7.5	6	39.5	24.5	24
8	6.5	40	25	24.5
8.5	7	40.5	25.5	25
9	7.5	41	26	25.5
9.5	8	42	26.5	26
10	8.5	42.5	27	26.5
10.5	9	43	27.5	-
11	9.5	44	28	27.5
11.5	10	44.5	28.5	-
12	10.5	45	29	28.5
13	11.5	46	30	29.5

Men's Shoe Size Conversion Table				
USA	UK	EUR	Mexico	Japan
6.5	6	39	25.5	24
7	6.5	40	26	24.5
7.5	7	41	26.5	25
8	7.5	41.5	27	25.5
8.5	8	42	27.5	26
9	8.5	43	28	26.5
9.5	9	43.5	28.5	27
10	9.5	44	29	27.5
10.5	10	44.5	29.5	28
11	10.5	45	30	28.5
11.5	11	46	30.5	29
12	11.5	46.5	31	29.5
12.5	12	47	31.5	30
13	12.5	48	32	30.5
13.5	13	48.5	32.5	31
14	13.5	49.5	33	31.5
15	14	50.5	34	_
16	15	52	35	-

In embodiments of the present invention, a shoe size indication system for determining a proper shoe size for a person's foot comprises outsole 20 having heel portion 21, forward portion 22, length 23, and width 24; heel placement indicator 30 positioned on heel portion 21; and a plurality of shoe size indicators 40 located on at least a portion of outsole forward portion 22. Each of the plurality of shoe size indicators 40 is located a distance from heel placement indicator 30 along length 23 of outsole 20 corresponding to a different shoe size and labeled with the corresponding shoe size. When the heel of the person's foot is aligned with heel placement indicator 30 and the person's toes are positioned to overlap the plurality of shoe size indicators 40, the shoe size indicator immediately beyond the end of the person's longest toe indicates the proper shoe size for the person's foot.

As such, a shoe size indication system on the outsole of a shoe is convenient to locate and does not require additional materials or adjustment of any movable components. Thus, the

present invention provides shoes with indicators for heel placement and shoe size on the outsoles and shoe size indication systems that are quick and simple to use and that allow accurate shoe size determinations without assistance by others.

**4**)

**5** 1**6** 1

A shoe outsole having a heel placement indicator 30 and shoe size indicators 40 as in the present invention may be constructed and/or implemented in different ways. For example, heel placement indicator 30 and shoe size indicators 40 can be permanently integrated into outsole 20, such as in a molded construction. A shoe size indication system integrated into a pair of shoes has the advantage of being readily available both in a store and at home after purchase.

Alternatively, shoe size indication systems of the present invention may be affixed to the surface of shoe outsoles. In embodiments, for example, heel placement indicator 30 and shoe size indicators 40 are printed onto outsole 20. In other embodiments, such a shoe size indication system is removably attached to outsole 20, such as by attaching to the outsole a template, or a thin sheet of material, having the system printed or stamped thereon. In still other embodiments, such a shoe size indication system is placed on packaging, such as a box, in which shoes are sold. Thus, shoes and shoe size indication systems of the present invention are simple and economical to manufacture and use.

When a shoe size indication system is printed, stamped, or otherwise attached to an outsole, the system may experience deterioration due to normal wear and tear caused by wearing shoes. To address this issue, shoes of the present invention may include a protective material affixed to the outsole. In an embodiment, such as in Figs. 8 and 9, shoe 10 comprises a transparent material 90 overlaying outsole 20 such that heel placement indicator 30 and shoe size indicators 40 can be seen through the material. Material 90 comprises a polymeric material, such as polyvinyl chloride (PVC), rubber, and/or other transparent materials resistant to rapid

suitable for use on a shoe sole while maintaining transparency to allow visualization of a shoe size indication system underneath. As an example, a shoe 10 having heel placement indicator 30

deterioration when worn on shoe outsoles. Material 90 may be clear or comprise any color

a **4**3

15)

4 and shoe size indicators 40 screen-printed onto outsole 20, includes an overlay of transparent

5 PVC (90) so as to protect the heel placement indicator 30 and shoe size indicators 40 from wear

while allowing visualization and use of the shoe size indication system through the material 90.

In the present invention, an embodiment of a particular shoe 10 has a specific size, and shoe outsole 20 comprises an indication of the specific size thereon. As shown in Fig.1, for example, outsole 20 includes the specific size 100 of shoe 10 (a size 7) enclosed in a circle placed on heel portion 21 where no other shoe size markings are located. Placing the size of the particular shoe on the outsole allows a customer to quickly compare the actual size of the shoe with the shoe size indicated for a customer whose shoe size is being measured. As such, the present invention provides for determining the proper shoe size for the person's foot being measured, as well as whether the particular shoe on which a shoe size indication system is being used is a proper size shoe for that person.

A shoe size indication system of the present invention, including heel placement indicator 30 and a plurality of shoe size indicators 40, may be placed on a left shoe and/or a right shoe of a pair of shoes, as shown in Figs. 2-7. In preferred embodiments, such a shoe size indication system is placed on both the left shoe 50 and the right shoe 60 of a pair of shoes.

In embodiments of the present invention, shoe size indicators 40 comprise standard shoe sizes for a particular age group. For example, in Fig. 2, outsoles 20 of toddlers' shoes include shoe size indicators 40 and shoe sizes 70 corresponding to standard shoe sizing dimensions for toddlers. In Fig. 3, outsoles 20 of pre-schoolers' shoes include shoe size indicators 40 and shoe

sizes 71 corresponding to standard shoe sizing dimensions for pre-schoolers. In Fig. 4, outsoles

2 20 of girls' shoes include shoe size indicators 40 and shoe sizes 72 corresponding to standard

shoe sizing dimensions for girls. In Fig. 5, outsoles 20 of boys' shoes include shoe size

3

6

7

8

9

17

18

19

20

21

22

23

4 indicators 40 and shoe sizes 73 corresponding to standard shoe sizing dimensions for boys.

5 Because children's feet grow rapidly, current sizing information is needed to determine a proper

size shoe to purchase, rather than relying on a previous shoe size. Since a shoe size indication

system on outsoles allows measurement of a child's shoe size without the need for additional

materials, such as a separate measuring device, or a child trying on shoes, the present invention

provides for a beneficially quick determination of a shoe size for a child.

Standard shoe sizes in the present invention comprise adult shoe sizes. In Fig. 6, for example, outsoles 20 of women's shoes include shoe size indicators 40 and shoe sizes 74 corresponding to standard shoe sizing dimensions for women. In Fig. 7, outsoles 20 of men's shoes include shoe size indicators 40 and shoe sizes 75 corresponding to standard shoe sizing dimensions for men. Standard sizing dimensions for other types of shoes, or other foot coverings, known in the art, such as shoes for certain sports or swim fins, can be used for those types of shoes and footwear. Thus, the present invention provides a customer, on a shoe or other item of footwear for sale, shoe size indicators and shoe sizes for accurately determining a proper shoe size with respect to standardized dimensions, including length, width, and overall configuration, for particular age groups.

In other embodiments, the standard shoe sizes for a particular age group further comprise gender-specific shoe sizes. For example, while shoes 10 in both Figs. 6 and 7 are adult-size shoes, shoes 10 intended for women in Fig. 6 comprise shoe sizes 4-11 (74), and shoes 10 intended for men in Fig. 7 comprise shoe sizes 7-13 (75).

In still other embodiments, outsoles 20 comprise patterns having appeal to the age group and gender that would typically wear the shoe sizes thereon. For example, as seen in Fig. 2, a shoe sole with sizing indicators 40 as in the present invention on an toddler's shoe further comprises designs 80 of stuffed animals, toys, and stars on outsole 20. Such designs provide objects of curiosity and interest for a toddler. In Fig. 3, a shoe sole with sizing indicators 40 on a pre-schooler's shoe includes a collection 81 of numbers, letters of the alphabet, and geometric figures. Such age-specific designs can foster a pre-schooler's interest in participating with parents in purchasing shoes and provide educational interest in the objects contained in the design. Other examples of patterns having age and gender-specific appeal are seen in Figs. 4-7, in which shoe soles 20 with sizing indicators 40 on girls', boys', women's, and men's shoes comprise designs including flowers 82, sports characters 83, and/or geometric patterns 84. In addition, when a person wearing a shoe having an age and/or gender-related pattern on the outsole walks on imprintable surfaces, such as sand, an imprint of such pattern is left on the surface by the shoe sole, providing another source of interest in the shoe.

**5**;

In the present invention, a method for determining a proper shoe size for a person's foot comprises first providing a shoe 10 comprising an outsole 20 having a heel portion 21, a forward portion 22, a length 23, and a width 24; a heel placement indicator 30 positioned on heel portion 21; and a plurality of shoe size indicators 40 located on at least a portion of the outsole forward portion 22, each of the shoe size indicators 40 located a distance, for example 41, 42, from heel placement indicator 30 along length 23 of outsole 20 corresponding to a different shoe size and labeled with the corresponding shoe size, for example 43, 44. Embodiments of such a method for determining a proper shoe size for a person's foot further comprise aligning the rear margin of the person's heel with heel placement indicator 30; positioning the person's toes to overlap the

plurality of shoe size indicators 40; and observing the location of the forward margin of the person's toes on the shoe size indicators 40. The shoe size indicator observed to be immediately beyond the end of the forward margin of the person's toes indicates the proper shoe size for the 3 person's foot. Thus, in use, a person's foot is quickly and easily placed against the bottom of a 4 shoe having a shoe size indication system of the present invention on the outsole to provide 5 accurate indication of a proper shoe size for the person. 6

1

2

7

8

9

14

15

16

17

18

19

20

21

22

23

In embodiments of a method for determining a proper shoe size for a person's foot of the present invention, heel placement indicator 30 is positioned on outsole heel portion 21 in alignment with proper placement of the person's heel inside shoe 10. In other embodiments, each of the plurality of shoe size indicators 40 further comprises a line 45 located across at least a portion of width 24 of outsole forward portion 22. In other embodiments, shoe 10 has a size, 100, for example, and the size 100 of shoe 10 is indicated on shoe outsole 20. As shown in Figs. 8 and 9, in yet other embodiments, shoe 10 further comprises a transparent material 90 overlaying outsole 20 wherein heel placement indicator 30 and shoe size indicators 40 can be seen through the material.

In embodiments of a method of the present invention, shoe size indicators 40 comprise standard shoe sizes for a particular age group, as described above with reference to Figs. 2-7. In other embodiments of such a method, standard shoe sizes for a particular age group further comprise gender-specific shoe sizes, as shown for women in Fig. 6 and for men in Fig 7, for example.

In embodiments of the present invention, a shoe for determining a proper shoe size comprises: an outsole having a heel portion, a forward portion, a length, and a width; a heel placement indicator positioned on the heel portion; and a plurality of shoe size indicators located on at least a portion of the forward portion, each of the plurality of shoe size indicators located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and labeled with the corresponding shoe size.

The second state of the second second

In other embodiments, a heel placement indicator is positioned on the outsole heel portion in alignment with proper placement of a heel inside the shoe. In other embodiments, each of the plurality of shoe size indicators further comprises a line located across at least a portion of the width of the outsole forward portion.

In still other embodiments, a heel placement indicator and a plurality of shoe size indicators are permanently integrated into the outsole. Alternatively, a heel placement indicator and a plurality of shoe size indicators are printed onto the outsole. In other embodiments, a shoe of the present invention further comprises a transparent material overlaying the outsole wherein the heel placement indicator and the plurality of shoe size indicators can be seen through the material.

In embodiments, a shoe of the present invention further comprises a size and the size of the shoe is indicated on the shoe outsole. In other embodiments, a heel placement indicator and a plurality of shoe size indicators are placed on each of a left shoe and a right shoe of a pair of shoes. In other embodiments, a plurality of shoe size indicators comprises standard shoe sizes for a particular age group. In still other embodiments, standard shoe sizes for a particular age group are gender-specific. In yet other embodiments, a shoe of the present invention further comprises patterns having appeal to the age group and gender that would typically wear the shoe sizes thereon.

In another embodiment, a shoe for determining a proper shoe size comprises: an outsole having a heel portion, a forward portion, a length, and a width; a heel placement indicator

positioned on the heel portion in alignment with proper placement of a heel inside the shoe; and a plurality of shoe size indicator lines located across at least a portion of the width of the forward portion, each of the plurality of shoe size indicator lines located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and labeled with the corresponding shoe size; wherein the shoe has a size and the size of the shoe is indicated on the shoe outsole; wherein the heel placement indicator and the plurality of shoe size indicator lines are placed on each of a left shoe and a right shoe of a pair of shoes; wherein the shoe sizes corresponding to the plurality of shoe size indicator lines comprises standard shoe sizes for a particular age group and gender; and wherein the shoe further comprises patterns having appeal to the age group and gender that would typically wear the shoe sizes thereon. In a similar embodiment, such a shoe further comprises a transparent material overlaying the outsole wherein the heel placement indicator and the plurality of shoe size indicator lines can be seen through the material.

In embodiments of the present invention, a shoe size indication system for determining a proper shoe size for a person's foot comprises: an outsole having a heel portion, a forward portion, a length, and a width; a heel placement indicator positioned on the heel portion; and a plurality of shoe size indicators located on at least a portion of the outsole forward portion, each of the plurality of shoe size indicators located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and labeled with the corresponding shoe size; wherein when the heel of the person's foot is aligned with the heel placement indicator and the person's toes are positioned to overlap the plurality of shoe size indicators, the shoe size indicator immediately beyond the end of the person's longest toe indicates the proper shoe size for the person's foot.

In other embodiments of a shoe size indication system, a heel placement indicator is positioned on the outsole heel portion in alignment with proper placement of a heel inside the shoe. In other embodiments, each of the plurality of shoe size indicators further comprises a line located across at least a portion of the width of the outsole forward portion.

19 de la constant de

**4**:

In still other embodiments of a shoe size indication system, a heel placement indicator and a plurality of shoe size indicators are permanently integrated into the outsole. Alternatively, a heel placement indicator and a plurality of shoe size indicators are printed onto the outsole. In other embodiments of a shoe size indication system, a shoe of the present invention further comprises a transparent material overlaying the outsole wherein the heel placement indicator and the plurality of shoe size indicators can be seen through the material.

In embodiments, a shoe of a shoe size indication system of the present invention further comprises a size and the size of the shoe is indicated on the shoe outsole. In other embodiments, a heel placement indicator and a plurality of shoe size indicators are placed on each of a left shoe and a right shoe of a pair of shoes. In other embodiments of a shoe size indication system, a plurality of shoe size indicators comprises standard shoe sizes for a particular age group. In still other embodiments, standard shoe sizes for a particular age group are gender-specific. In yet other embodiments, a shoe of shoe size indication system of the present invention further comprises patterns having appeal to the age group and gender that would typically wear the shoe sizes thereon.

In another embodiment, a shoe size indication system for determining a proper shoe size for a person's foot comprises: an outsole having a heel portion, a forward portion, a length, and a width; a heel placement indicator positioned on the heel portion in alignment with proper placement of a heel inside the shoe; and a plurality of shoe size indicator lines located across at

least a portion of the width of the forward portion, each of the plurality of shoe size indicator lines located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and labeled with the corresponding shoe size; wherein when the heel of the person's foot is aligned with the heel placement indicator and the person's toes are positioned to overlap the plurality of shoe size indicators, the shoe size indicator immediately beyond the end of the person's longest toe indicates the proper shoe size for the person's foot; wherein the shoe has a size and the size of the shoe is indicated on the shoe outsole; wherein the heel placement indicator and the plurality of shoe size indicator lines are placed on each of a left shoe and a right shoe of a pair of shoes; wherein the shoe sizes corresponding to the plurality of shoe size indicator lines comprises standard shoe sizes for a particular age group and gender; and wherein the shoe further comprises patterns having appeal to the age group and gender that would typically wear the shoe sizes thereon. In a similar embodiment, such a shoe of a shoe size indication system further comprises a transparent material overlaying the outsole wherein the heel placement indicator and the plurality of shoe size indicator lines can be seen through the material.

1

2

3

4

5

6

7

8

9

10 mm mm mm mm 12 mm 13 mm 13

141 15

16

17

18

19

20

21

22

23

In embodiments of the present invention, a method for determining a proper shoe size for a person's foot, the person's foot having a heel with a rear margin and toes with a forward margin, comprises: providing a shoe comprising an outsole having a heel portion, a forward portion, a length, and a width, a heel placement indicator positioned on the heel portion, and a plurality of shoe size indicators located on at least a portion of the outsole forward portion, each of the plurality of shoe size indicators located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and labeled with the corresponding shoe size; aligning the rear margin of the person's heel with the heel placement

indicator; positioning the person's toes to overlap the plurality of shoe size indicators; and
observing the location of the forward margin of the person's toes on the plurality of shoe size
indicators; wherein the shoe size indicator immediately beyond the end of the forward margin of

the person's toes indicates the proper shoe size for the person's foot.

**5** 

In other embodiments of a method for determining a proper shoe size for a person's foot, a heel placement indicator is positioned on the outsole heel portion in alignment with proper placement of a heel inside the shoe. In other embodiments of a method of the present invention, each of the plurality of shoe size indicators further comprises a line located across at least a portion of the width of the outsole forward portion.

In still other embodiments a method for determining a proper shoe size for a person's foot, a heel placement indicator and a plurality of shoe size indicators are permanently integrated into the outsole. Alternatively, a heel placement indicator and a plurality of shoe size indicators are printed onto the outsole. In other embodiments of a method of the present invention, a shoe further comprises a transparent material overlaying the outsole wherein the heel placement indicator and the plurality of shoe size indicators can be seen through the material.

In embodiments of a method for determining a proper shoe size for a person's foot, a shoe of the present invention further comprises a size and the size of the shoe is indicated on the shoe outsole. In other embodiments of a method of the present invention, a heel placement indicator and a plurality of shoe size indicators are placed on each of a left shoe and a right shoe of a pair of shoes. In other embodiments of a method of the present invention, a plurality of shoe size indicators comprises standard shoe sizes for a particular age group. In still other embodiments of a method of the present invention, standard shoe sizes for a particular age group are gender-specific.

In another embodiment, a method for determining a proper shoe size for a person's foot, the person's foot having a heel with a rear margin and toes with a forward margin, comprises: providing a shoe comprising an outsole having a heel portion, a forward portion, a length, and a width, a heel placement indicator positioned on the heel portion in alignment with proper placement of the person's heel inside the shoe, and a plurality of shoe size indicator lines located on at least a portion of the outsole forward portion, each of the plurality of shoe size indicator lines located a distance from the heel placement indicator along the length of the outsole corresponding to a different shoe size and labeled with the corresponding shoe size, the shoe sizes corresponding to the plurality of shoe size indicator lines further comprising standard shoe sizes for a particular age group and gender, the shoe further comprising a size and the size of the shoe indicated on the shoe outsole; aligning the rear margin of the person's heel with the heel placement indicator; positioning the person's toes to overlap the plurality of shoe size indicators; and observing the location of the forward margin of the person's toes on the plurality of shoe size indicators; wherein the shoe size indicator immediately beyond the end of the forward margin of the person's toes indicates the proper shoe size for the person's foot.

Although the present invention has been described with reference to particular embodiments, it should be recognized that these embodiments are merely illustrative of the principles of the present invention. Those of ordinary skill in the art will appreciate that a shoe with sizing indicators, a shoe size indication system, and methods for determining a shoe size of the present invention may be constructed and implemented in other ways and embodiments.

Accordingly, the description herein should not be read as limiting the present invention, as other embodiments also fall within the scope of the present invention.

23 24

1

2

3

4

5

6

7

8

9

17

18

19

20

21

22